

DERWENT-ACC-NO: 1993-187362

DERWENT-WEEK: 199323

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TITLE: Soln. for drilling gas and oil wells - contains ellipsoidal glass beads as additive reducing friction between walls of well and casing string

INVENTOR-NAME: KOLESOV, L V; KUROCHKIN, B M ; MASICH, V I

PRIORITY-DATA: 1989SU-4634708 (January 13, 1989)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SU 1740396 A1	June 15, 1992	N/A	003	C09K 007/02

INT-C_(IPC): C09K007/02

ABSTRACTED-PUB-NO: SU 1740396A

BASIC-ABSTRACT: The treatment is aimed to reduce friction between drilling column and walls of well, and prevent drilling equipment from stalling. The method is based on mixing drilling soln. with ellipsoidal glass beads having larger semi-axis by 1.25-2 times longer than their smaller semi-axis. The beads are introduced in amt. at least 2 kg/cu.m, are chemically inert, non-soluble in water and hydrocarbons, and have chemical compsn. (in wt.%): SiO₂ 61-61.5, CaO 18-18.5, Al₂O₃ 4.6-4.9, Na₂O 13.5-14, MgO 0.3-0.4, B₂O₃ 1.1-1.4 and K₂O 1.5-2.0. The optimal shape and amt. of glass beads have been found using empirical expressions, based on physical parameters of materials and working characteristics of well. The proposed ellipsoidal beads have higher mechanical resistance than spherically-shaped beads. The stress and load are reduced by 65% compared to those for spherical particles, and the contact area is increased by 4-5 times.

USE/ADVANTAGE - In drilling of oil and gas wells, as a method of reducing friction between drilling column and walls of well. The method provides increased efficiency at reduced consumption of additive. The proposed method results in improvement of antifriction properties of drilling soln. at reduced consumption of additive. Other parameters of drilling soln. remain unaffected owing to inert character of glass. Bul.22/15.6.92 1/1

----- KWIC -----

Basic Abstract Text - ABTX:

The treatment is aimed to reduce friction between drilling column and walls of

well, and prevent drilling equipment from stalling. The method is based on mixing drilling soln. with ellipsoidal glass beads having larger semi-axis by 1.25-2 times longer than their smaller semi-axis. The beads are introduced in amt. at least 2 kg/cu.m, are chemically inert, non-soluble in water and hydrocarbons, and have chemical compsn. (in wt.%): SiO₂ 61-61.5, CaO 18-18.5,

Al₂O₃ 4.6-4.9, Na₂O 13.5-14, MgO 0.3-0.4, B₂O₃ 1.1-1.4 and K₂O 1.5-2.0. The

optimal shape and amt. of glass beads have been found using empirical expressions, based on physical parameters of materials and working characteristics of well. The proposed ellipsoidal beads have higher mechanical resistance than spherically-shaped beads. The stress and load are reduced by 65% compared to those for spherical particles, and the contact area is increased by 4-5 times.

Basic Abstract Text - ABTX:

USE/ADVANTAGE - In drilling of oil and gas wells, as a method of reducing friction between drilling column and walls of well. The method provides increased efficiency at reduced consumption of additive. The proposed method results in improvement of antifriction properties of drilling soln. at reduced consumption of additive. Other parameters of drilling soln. remain unaffected owing to inert character of glass. Bul.22/15.6.92 1/1

Title - TIX:

Soln. for drilling gas and oil wells - contains ellipsoidal glass beads as additive reducing friction between walls of well and casing string

Standard Title Terms - TTX:

SOLUTION DRILL GAS OIL WELL CONTAIN ELLIPSOID GLASS BEAD
ADDITIVE REDUCE
FRICTION WALL WELL CASING STRING

DERWENT-ACC-NO: 1993-358142

DERWENT-WEEK: 199345

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TITLE: Antifrictional compsn. - contains poly:tetra:fluoro-ethylene and slag filler, having increased hardness and strength of prods.

INVENTOR-NAME: CHAPCHIKOV, I I

PRIORITY-DATA: 1991SU-4902020 (January 11, 1991)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SU 1770326 A1	October 23, 1992	N/A	003	C08J 005/16

INT-C_(IPC): C08J005/16; C08K003/00 ; C08L027/18 ; C08K003/00 ; C08K003:22 ; C08K003:34

ABSTRACTED-PUB-NO: SU 1770326A

BASIC-ABSTRACT: The compsn. contains in wt. %: PTFE 70-80; and blast furnace

slag 20-30. Slag as filler is ground and screened to fraction 10-80 micro-m. Powdered components are mixed in electromagnetic mixer, pressed at 80 MPa, baked in electric furnace at 380 deg.C, and samples finished on lathe. Prods. have breaking strength 39-43 MPa, hardness 79-83 MPa, and shock viscosity 46-62

kJ/sq.m. The tear intensity in dry friction at 1 m/s and 0.1 MPa on cast iron of surface roughness 0.63 is 0.32-0.33 mg/hour; the coefficient of friction is 0.16-0.17.

Slag contains in wt. %: SiO₂ 36.5-40.4; Al₂O₃ 5.9-7.9; CaO 43.0-47.8; MgO 5.8-7.5; MnO 0.05-0.46; FeO 0.35-1.12; S 1.5-2.1; and TiO₂ the rest to 100.

USE/ADVANTAGE - Used in technology of antifrictional thermoplastic filled compsns. on the basis of fluoroplastic for elements working with no or limited lubrication. The hardness and strength of prods. is increased.

Bul.39/23.10.92

----- KWIC -----

Basic Abstract Text - ABTX:

The compsn. contains in wt. %: PTFE 70-80; and blast furnace slag 20-30. Slag as filler is ground and screened to fraction 10-80 micro-m. Powdered

components

are mixed in electromagnetic mixer, pressed at 80 MPa, baked in electric furnace at 380 deg.C, and samples finished on lathe. Prods. have breaking strength 39-43 MPa, hardness 79-83 MPa, and shock viscosity 46-62 kJ/sq.m.

The

tear intensity in dry friction at 1 m/s and 0.1 MPa on cast iron of surface roughness 0.63 is 0.32-0.33 mg/hour; the coefficient of friction is 0.16-0.17.

Basic Abstract Text - ABTX:

Slag contains in wt.%: SiO₂ 36.5-40.4; Al₂O₃ 5.9-7.9; CaO 43.0-47.8; MgO 5.8-7.5; MnO 0.05-0.46; FeO 0.35-1.12; S 1.5-2.1; and TiO₂ the rest to 100.

DERWENT-ACC-NO: 1979-88835B

DERWENT-WEEK: 197949

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TITLE: Moulding compsn. for heavy-load oil-friction assemblies - includes kaolin, cellulose, aluminium oxide, calcium stearate and mineral wool

INVENTOR-NAME: GOLKIN, V B; SHUMAKOVA, E V ; SOLOVEVA, G B

PRIORITY-DATA: 1977SU-2528290 (September 26, 1977)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SU 652198 A	March 17, 1979	N/A	000	N/A

INT-C_(IPC): C08J005/14; C08K007/14 ; C08L061/10

ABSTRACTED-PUB-NO: SU 652198A

BASIC-ABSTRACT: Moulding compsn. is for operation in heavy-load assemblies in

conditions of oil function, e.g. in high power endless track vehicles. The compsn. comprises (in wt.%) phenol-formaldehyde resin 17-22; asbestos 40-48; graphite 1.0-1.5; kaolin 12-18; cellulose 4-6, aluminium oxide 4-6, calcium stearate and mineral wool. The latter comprises (in wt.%) SiO₂ 32.5-35.5; Al₂O₃ 14.0-18.0; mgO 4.0-8.0; Fe₂O₃ 0.5-1.0; CaO 39.0-43.0; and S 0.3-1.0. The

presence of kaolin, cellulose, aluminium oxide, calcium stearate and mineral wool increases the coefft. of function, wear-resistance and specific impact strength.

----- KWIC -----

Basic Abstract Text - ABTX:

Moulding compsn. is for operation in heavy-load assemblies in conditions of oil function, e.g. in high power endless track vehicles. The compsn. comprises (in wt.%) phenol-formaldehyde resin 17-22; asbestos 40-48; graphite 1.0-1.5; kaolin 12-18; cellulose 4-6, aluminium oxide 4-6, calcium stearate and mineral wool. The latter comprises (in wt.%) SiO₂ 32.5-35.5; Al₂O₃ 14.0-18.0; mgO 4.0-8.0; Fe₂O₃ 0.5-1.0; CaO 39.0-43.0; and S 0.3-1.0. The presence of kaolin, cellulose, aluminium oxide, calcium stearate and mineral wool increases the coefft. of function, wear-resistance and specific impact strength.

Title - TIX:

Moulding compsn. for heavy-load oil-friction assemblies - includes kaolin, cellulose, aluminium oxide, calcium stearate and mineral wool

Standard Title Terms - TTX:

MOULD COMPOSITION HEAVY LOAD OIL FRICTION ASSEMBLE KAOLIN
CELLULOSE ALUMINIUM
OXIDE CALCIUM STEARATE MINERAL WOOL

DERWENT-ACC-NO: 1981-94976D

DERWENT-WEEK: 198151

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TITLE: Carbon base used for prodn of siliconised antifriction material - is made from a mixt. of carbon filler, phenol!- formaldehyde! resin and a glass ceramic

INVENTOR-NAME: BANOVA, A S; KOSHELEV, Y I ; KOSOVA, L I ;

TATIEVSKAY, E M

; TELEGIN, V D

PRIORITY-DATA: 1980WO-SU00102 (June 9, 1980) , 1980DE-3050426 (June 9, 1980)

, 1982US-0346035 (January 26, 1982)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 8103486 A	December 10, 1981	R	012	N/A
CH 650760 A	August 15, 1985	N/A	000	N/A
DE 3050426 A	August 26, 1982	N/A	000	N/A
DE 3050426 C	July 17, 1986	N/A	000	N/A
FR 2485554 A	December 31, 1981	N/A	000	N/A
SE 8200717 A	April 5, 1982	N/A	000	N/A
US 4435538 A	March 6, 1984	N/A	000	N/A

INT-C _(IPC): C01B031/36; C04B035/54 ; C08K003/36 ; C08L061/10

ABSTRACTED-PUB-NO: DE 3050426C

BASIC-ABSTRACT: Compsn. for the prepn. of C materials used in the prodn. of siliconised antifriction materials comprises (by wt.%):C filler 65-85, phenol-formaldehyde resin 12-30 and a glass ceramic 3-5. The glass ceramic comprises:Al₂O₃ 10-12, CaO 12-14, MgO 9-11, Na₂O 5-6 and SiO₂ the balance.

The C filler is pref. C powder of particle size 0.01-0.5mm, or C fibre, or a mixt. of powder and fibre in a wt. ratio of 1-5:1.

The antifriction material prod. has high wear resistance, typically 0.010-0.031mm./1000 hrs.; a compressive strength of 4500-5500 kg./sq.cm.; an impact resistance of 2.2-22.0 kg.cm/sq.cm.; and good resistance to chemically aggressive liq. media.

ABSTRACTED-PUB-NO: US 4435538A

EQUIVALENT-ABSTRACT: A carbon based material consists (wt.%) of A) as known a C

filler and a phenol/HCOH resin and B) a vitreous ceramic compsn. composed of

10-12 Al₂O₃, 12-14 CaO, 9-11 MgO, 5-6 Na₂O and up to 100 SiO₂. The material consists of 65-85 C filler, 12-30 resin and 3-5 vitreous ceramic. The C filler is pref. a C powder of particle size 0.01-0.5 mm or C fibres, esp. a mixt. of fibres and powder in weight ratio 1:1-5.

USE/ADVANTAGE - For the prodn. of siliconised anti-friction parts; the material has a greater strength and a lower wear rate than known ones in neutral and aggressive liq. media, in liq. media contg. grinding aids and in pourable goods. (4pp)

Compsn. for the prepn. of a carbonaceous base for use in mfr. of siliconised antifricition materials, comprises a carbonaceous filler and phenol-formaldehyde resin. The comps. further comprises a sital contg. 10-12 wt% H₂O₃, 12-14 wt% CaO, 9-11 wt% MgO, 5-6 wt% Na₂O, and SiO₂ 100 wt%. The filler is present in amt. 65-85 wt%, resin 12-30 wt% and sital 3-5 wt%.

Pref. the filler contains a carbon powder of particle size 0.01-0.5 mm, carbon fibres, or a mixt. of fibres to powder in wt. ratio 1:1-5. (3pp)

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Basic Abstract Text - ABTX:

Compsn. for the prepn. of C materials used in the prodn. of siliconised antifricition materials comprises (by wt.%): C filler 65-85, phenol-formaldehyde resin 12-30 and a glass ceramic 3-5. The glass ceramic comprises: Al₂O₃ 10-12, CaO 12-14, MgO 9-11, Na₂O 5-6 and SiO₂ the balance.

Equivalent Abstract Text - ABEQ:

A carbon based material consists (wt.%) of A) as known a C filler and a phenol/HCOH resin and B) a vitreous ceramic comps. composed of 10-12 Al₂O₃, 12-14 CaO, 9-11 MgO, 5-6 Na₂O and up to 100 SiO₂. The material consists of 65-85 C filler, 12-30 resin and 3-5 vitreous ceramic. The C filler is pref. a C powder of particle size 0.01-0.5 mm or C fibres, esp. a mixt. of fibres and powder in weight ratio 1:1-5.

Equivalent Abstract Text - ABEQ:

USE/ADVANTAGE - For the prodn. of siliconised anti-friction parts; the material has a greater strength and a lower wear rate than known ones in neutral and aggressive liq. media, in liq. media contg. grinding aids and in pourable goods. (4pp)

Equivalent Abstract Text - ABEQ:

Compsn. for the prepn. of a carbonaceous base for use in mfr. of siliconised antifriction materials, comprises a carbonaceous filler and phenol-formaldehyde resin. The compsn. further comprises a sital contg. 10-12 wt% H_2O_3 , 12-14 wt%

CaO, 9-11 wt% MgO, 5-6 wt% Na₂O, and SiO₂ 100 wt%. The filler is present in amt. 65-85 wt%, resin 12-30 wt% and sital 3-5 wt%.

DERWENT-ACC-NO: 1989-110135

DERWENT-WEEK: 198915

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TITLE: Friction material for disc brakes, etc - contg. e.g. phenol! resin binder, friction regulator, e.g. cashew dust and rock wool reinforcing fibre

INVENTOR-NAME:

PRIORITY-DATA: 1987JP-0211300 (August 27, 1987)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 01055441 A	March 2, 1989	N/A	002	N/A

INT-C_(IPC): C08J005/14; C09K003/14 ; D04H001/42 ; F16D069/02

ABSTRACTED-PUB-NO: JP 01055441A

BASIC-ABSTRACT: A friction material contains 5-30 wt. % a binder e.g. phenol resin and 2-80 wt. % friction regulator e.g. cashew dust, barium sulphate, or graphite, together with 1-50 wt. % reinforcing fibre e.g. rock wool contg. 30-70 pts. wt. SiO₂, 3-20 Al₂O₃, 2-10 FeO, 0-3 Fe₂O₃, 0-2Cr₂O₃, 0-45 CaO, 0-30

MgO, 0-3 Mn, and 0-3 S, with or without one or two or more of steel fibre, glass fibre, and aromatic polyamide fibre.

USE/ADVANTAGE - The friction material to be used in brake lining, disc brake, pad, clutch facing, etc., for auto car and industrial machine, etc. has high wear resistance and high mechanical strength similar to or higher than the conventional ones using asbestos.

----- KWIC -----

Basic Abstract Text - ABTX:

A friction material contains 5-30 wt. % a binder e.g. phenol resin and 2-80 wt. % friction regulator e.g. cashew dust, barium sulphate, or graphite, together with 1-50 wt. % reinforcing fibre e.g. rock wool contg. 30-70 pts. wt. SiO₂, 3-20 Al₂O₃, 2-10 FeO, 0-3 Fe₂O₃, 0-2Cr₂O₃, 0-45 CaO, 0-30 MgO, 0-3 Mn, and 0-3

S, with or without one or two or more of steel fibre, glass fibre, and aromatic polyamide fibre.

Basic Abstract Text - ABTX:

USE/ADVANTAGE - The friction material to be used in brake lining, disc brake, pad, clutch facing, etc., for auto car and industrial machine, etc. has high wear resistance and high mechanical strength similar to or higher than the conventional ones using asbestos.

Title - TIX:

Friction material for disc brakes, etc - contg. e.g. phenol! resin binder, friction regulator, e.g. cashew dust and rock wool reinforcing fibre

Standard Title Terms - TTX:

FRICION MATERIAL DISC BRAKE CONTAIN POLYPHENOL RESIN BIND
FRICION REGULATE
CASHEW DUST ROCK WOOL REINFORCED FIBRE

DERWENT-ACC-NO: 1989-275142

DERWENT-WEEK: 198938

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TITLE: Rubber compsn. for tyres, brake pads etc. - contg. hollow silica particles, calcium carbonate, sulphur, etc.

INVENTOR-NAME:

PRIORITY-DATA: 1988JP-0026336 (February 6, 1988)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 01201344 A	August 14, 1989	N/A	004	N/A

INT-C_(IPC): C08K003/26; C08K007/26 ; C08L021/00

ABSTRACTED-PUB-NO: JP 01201344A

BASIC-ABSTRACT: The rubber compsn. comprises (wt.%) crude rubber about 30, calcium carbonate about 20, sulphur about 10, ground rubber about 10 and hollow silica particles about 30.

USE/ADVANTAGE - Useful for tyres, brake pads, packing, couplers or various building materials. Compared with conventional rubber compsn. contg. carbon black, the compsn. holds its basic properties and nature even when coloured. Since the compsn. contains no carbon black, it is easily coloured. The hollow silica particles give superior abrasion resistance, high coefft. of friction and good thermal resistivity.

In an example, hollow silica powder with particle dia. 1-300 microns, bulk density 250-400 kg/m³, specific gravity 0.5-0.75, m.pt. 1400 deg.C, electric resistivity 10 power 10 to 10 power 12 Ohm-cm, heat conductivity coefft. 0.07-0.12, reflective index 1.5 1.6 and chemical compsn. (wt.%), SiO₂ 50-60, Al₂O₃ 20-40, Fe₂O₃ 2-8, K₂O 1-4, CaO 0.5-3.0, TiO₂ 1-3, MgO 0.8-2 and Na₂O 0.7-1.0 was used in a rubber compsn. composed (wt.%) crude rubber 30, calcium carbonate 20, sulphur 10, ground rubber 10 and the hollow silica powder 30.

----- KWIC -----

Basic Abstract Text - ABTX:

USE/ADVANTAGE - Useful for tyres, brake pads, packing, couplers or various building materials. Compared with conventional rubber compsn. contg. carbon black, the compsn. holds its basic properties and nature even when coloured. Since the compsn. contains no carbon black, it is easily coloured. The hollow silica particles give superior abrasion resistance, high coefft. of friction and good thermal resistivity.

Basic Abstract Text - ABTX:

In an example, hollow silica powder with particle dia. 1-300 microns, bulk density 250-400 kg/m³, specific gravity 0.5-0.75, m.pt. 1400 deg.C, electric resistivity 10 power 10 to 10 power 12 Ohm-cm, heat conductivity coefft. 0.07-0.12, reflective index 1.5 1.6 and chemical compsn. (wt.%), SiO₂ 50-60, Al₂O₃ 20-40, Fe₂O₃ 2-8, K₂O 1-4, CaO 0.5-3.0, TiO₂ 1-3, MgO 0.8-2 and Na₂O 0.7-1.0 was used in a rubber compsn. composed (wt.%) crude rubber 30, calcium carbonate 20, sulphur 10, ground rubber 10 and the hollow silica powder 30.

DERWENT-ACC-NO: 1992-247812

DERWENT-WEEK: 199230

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TITLE: Polymeric frictional compsn. - contains butadiene! rubber, vulcaniser, barite, asbestos, carbon and slag

INVENTOR-NAME: SHIRYAEV, B A; TROITSKAYA, M A

PRIORITY-DATA: 1979SU-2852558 (December 14, 1979)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SU 877921 A1	October 30, 1991	N/A	002	C08L 009/00

INT-C_(IPC): C08K003/22; C08L009/00

ABSTRACTED-PUB-NO: SU 877921A

BASIC-ABSTRACT: The compsn. contains (in wt.%): butadiene rubber 15-25; vulcaniser group 2-3; barite 20-40; asbestos 7-27; technical carbon 6-15; and slag 10-30. Increased strength of rubber made of the compsn. is due to the slag component.

The slag contains (in wt.%): SiO₂ 41-46; CaO 24-32; Al₂O₃ 9-13; FeO 5-13; MnO

5-8; MgO 0.5-1.5; Fe₂O₃ 0.5-1.5. The critical prod. strength to tear is 8.5-9.0 MPa. Press-forming is at 180-200 deg.C and 20-40 MPa.

USE/ADVANTAGE - In rubber industry; in the prodn. of polymeric frictional parts. Physico-mechanical properties of the prods. are improved.
Bul.40/30.10.91

----- KWIC -----

Basic Abstract Text - ABTX:

The slag contains (in wt.%): SiO₂ 41-46; CaO 24-32; Al₂O₃ 9-13; FeO 5-13; MnO

5-8; MgO 0.5-1.5; Fe₂O₃ 0.5-1.5. The critical prod. strength to tear is 8.5-9.0 MPa. Press-forming is at 180-200 deg.C and 20-40 MPa.

Standard Title Terms - TTX:

POLYMERISE FRICTION COMPOSITION CONTAIN POLYBUTADIENE
RUBBER VULCANISATION
BARITE ASBESTOS CARBON SLAG

DERWENT-ACC-NO: 1993-358142

DERWENT-WEEK: 199345

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TITLE: Antifrictional compsn. - contains poly:tetra:fluoro-ethylene and slag filler, having increased hardness and strength of prods.

INVENTOR-NAME: CHAPCHIKOV, I I

PRIORITY-DATA: 1991SU-4902020 (January 11, 1991)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SU 1770326 A1	October 23, 1992	N/A	003	C08J 005/16

INT-C _(IPC): C08J005/16; C08K003/00 ; C08L027/18 ; C08K003/00 ; C08K003:22 ; C08K003:34

ABSTRACTED-PUB-NO: SU 1770326A

BASIC-ABSTRACT: The compsn. contains in wt. %: PTFE 70-80; and blast furnace

slag 20-30. Slag as filler is ground and screened to fraction 10-80 micro-m. Powdered components are mixed in electromagnetic mixer, pressed at 80 MPa, baked in electric furnace at 380 deg.C, and samples finished on lathe. Prods. have breaking strength 39-43 MPa, hardness 79-83 MPa, and shock viscosity 46-62

kJ/sq.m. The tear intensity in dry friction at 1 m/s and 0.1 MPa on cast iron of surface roughness 0.63 is 0.32-0.33 mg/hour; the coefficient of friction is 0.16-0.17.

Slag contains in wt. %: SiO₂ 36.5-40.4; Al₂O₃ 5.9-7.9; CaO 43.0-47.8; MgO 5.8-7.5; MnO 0.05-0.46; FeO 0.35-1.12; S 1.5-2.1; and TiO₂ the rest to 100.

USE/ADVANTAGE - Used in technology of antifrictional thermoplastic filled compsns. on the basis of fluoroplastic for elements working with no or limited lubrication. The hardness and strength of prods. is increased.

Bul.39/23.10.92

----- KWIC -----

Basic Abstract Text - ABTX:

The compsn. contains in wt. %: PTFE 70-80; and blast furnace slag 20-30. Slag as filler is ground and screened to fraction 10-80 micro-m. Powdered

components

are mixed in electromagnetic mixer, pressed at 80 MPa, baked in electric furnace at 380 deg.C, and samples finished on lathe. Prods. have breaking strength 39-43 MPa, hardness 79-83 MPa, and shock viscosity 46-62 kJ/sq.m.

The

tear intensity in dry friction at 1 m/s and 0.1 MPa on cast iron of surface roughness 0.63 is 0.32-0.33 mg/hour; the coefficient of friction is 0.16-0.17.

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Slag contains in wt.%: SiO₂ 36.5-40.4; Al₂O₃ 5.9-7.9; CaO 43.0-47.8; MgO 5.8-7.5; MnO 0.05-0.46; FeO 0.35-1.12; S 1.5-2.1; and TiO₂ the rest to 100.

Derwent Accession Number - NRAN:

1993-358142

DERWENT-ACC-NO: 1993-187362

DERWENT-WEEK: 199323

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TITLE: Soln. for drilling gas and oil wells - contains ellipsoidal glass beads
as additive reducing friction between walls of well and casing string

INVENTOR-NAME: KOLESOV, L V; KUROCHKIN, B M ; MASICH, V I

PRIORITY-DATA: 1989SU-4634708 (January 13, 1989)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SU 1740396 A1	June 15, 1992	N/A	003	C09K 007/02

INT-C_(IPC): C09K007/02

ABSTRACTED-PUB-NO: SU 1740396A

BASIC-ABSTRACT: The treatment is aimed to reduce friction between drilling column and walls of well, and prevent drilling equipment from stalling. The method is based on mixing drilling soln. with ellipsoidal glass beads having larger semi-axis by 1.25-2 times longer than their smaller semi-axis. The beads are introduced in amt. at least 2 kg/cu.m, are chemically inert, non-soluble in water and hydrocarbons, and have chemical compsn. (in wt.%): SiO₂ 61-61.5, CaO 18-18.5, Al₂O₃ 4.6-4.9, Na₂O 13.5-14, MgO 0.3-0.4, B₂O₃ 1.1-1.4 and K₂O 1.5-2.0. The optimal shape and amt. of glass beads have been found using empirical expressions, based on physical parameters of materials and working characteristics of well. The proposed ellipsoidal beads have higher mechanical resistance than spherically-shaped beads. The stress and load are reduced by 65% compared to those for spherical particles, and the contact area is increased by 4-5 times.

USE/ADVANTAGE - In drilling of oil and gas wells, as a method of reducing friction between drilling column and walls of well. The method provides increased efficiency at reduced consumption of additive. The proposed method results in improvement of antifriction properties of drilling soln. at reduced consumption of additive. Other parameters of drilling soln. remain unaffected owing to inert character of glass. Bul.22/15.6.92 1/1

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Basic Abstract Text - ABTX:

The treatment is aimed to reduce friction between drilling column and walls of

well, and prevent drilling equipment from stalling. The method is based on mixing drilling soln. with ellipsoidal glass beads having larger semi-axis by 1.25-2 times longer than their smaller semi-axis. The beads are introduced in amt. at least 2 kg/cu.m, are chemically inert, non-soluble in water and hydrocarbons, and have chemical compsn. (in wt.%): SiO₂ 61-61.5, CaO 18-18.5, Al₂O₃ 4.6-4.9, Na₂O 13.5-14, MgO 0.3-0.4, B₂O₃ 1.1-1.4 and K₂O 1.5-2.0. The

optimal shape and amt. of glass beads have been found using empirical expressions, based on physical parameters of materials and working characteristics of well. The proposed ellipsoidal beads have higher mechanical resistance than spherically-shaped beads. The stress and load are reduced by 65% compared to those for spherical particles, and the contact area is increased by 4-5 times.

Basic Abstract Text - ABTX:

USE/ADVANTAGE - In drilling of oil and gas wells, as a method of reducing friction between drilling column and walls of well. The method provides increased efficiency at reduced consumption of additive. The proposed method results in improvement of antifriction properties of drilling soln. at reduced consumption of additive. Other parameters of drilling soln. remain unaffected owing to inert character of glass. Bul.22/15.6.92 1/1

Derwent Accession Number - NRAN:

1993-187362

Title - TIX:

Soln. for drilling gas and oil wells - contains ellipsoidal glass beads as additive reducing friction between walls of well and casing string

Standard Title Terms - TTX:

SOLUTION DRILL GAS OIL WELL CONTAIN ELLIPSOID GLASS BEAD
ADDITIVE REDUCE
FRICTION WALL WELL CASING STRING

DERWENT-ACC-NO: 1972-29537T

DERWENT-WEEK: 197219

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TITLE: Brake-linings for motor vehicles - including novolak resin asbestos and glass-fibres and waste rubber flakes

INVENTOR-NAME:

PRIORITY-DATA: 1970RO-0064740 (October 20, 1970)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 2150845 A		N/A	000	N/A
FR 2111559 A		N/A	000	N/A

INT-C _(IPC): C08G037/08; F16D069/02

ABSTRACTED-PUB-NO: DE 2150845A

BASIC-ABSTRACT: Mixture suitable for prdn. of brake linings comprises by wt. 10-30% novolac; 1-3% hexamethylene tetramine; 52-80% elongated asbestos flakes;

5-20% kaolin; 0-55% glass-fibres; 0-12% waste rubber crumb (below 1mm); 0-10%

graphite concentrate; 0-10% SiO₂; 0-2% Fe₂O₃; 0-15% Al₂O₃; 0-0.8% TiO₂; 0-1.2%

HoS₂; 0-0.18% CaO. Product has high abrasion resistance and coefficient of friction even in conditions of elevated thermal stress.

----- KWIC -----

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